

MR2349-741
S.N. 10/002,104
Amendment After Final dated 5 September 2003
Reply to Office Action of 20 June 2003

IN THE SPECIFICATION:

Please replace the earlier-amended paragraph at Page 2, Lines 19-24 with the following amended paragraph:

BA
The object of the present invention is to provide an input device having the functions of a fusible link, an inrush current limiter, and an EMC choke. A fusible resistance winding is wound around a magnetic component having a high resistance and a capability to withstand voltage differences generated when the fusible/resistance winding blows high permeability. Because the input device of the present invention can replace the conventional three separate subassemblies, the object of reducing the cost and shrinking the volume can be accomplished.

Please replace the three earlier-amended paragraphs at Page 3, Line 12 -

Page 4, Line 4 with the following amended paragraphs:

As shown in FIGS. 2 and 3, the present invention provides a multipurpose input device conforming to the requirements of safety and EMC. The multipurpose input device is series-connected between an AC input source and a rectifying circuit 3. In this embodiment of the present invention, the rectifying circuit 3 comprises a bridge rectifier D1-D4 and a capacitor C. The multipurpose input device comprises a magnetic component 1, ~~a pair of electrical leads 10~~, and a resistance coil 2.

The magnetic component 1 is a magnetic core having ferromagnetic characteristic. The material of the magnetic core ought to have a high resistivity and a capability high permeability to bear voltage difference generated when the resistance coil 2 blows; otherwise, it is also feasible to use an appropriate coil frame or package mechanism to separate the magnetic core from the circuit.

The resistance coil 2 is a fusible/resistance winding wound around the magnetic component 1 ~~and is connected to electrical leads 10 at first terminal 11 and second terminal 12~~. The resistance coil 2 has the functions of a fusible link, an inrush current limiter, and an EMC choke. That is, it can limit the input current within a safe value, reduce the inrush current, and choke the noise affecting the AC input source.
